

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-17 (cancelled).

18. (Currently amended) A nebulizer comprising:
 - a container adapted to contain a liquid to be nebulized;
 - a tubular energy transmitter including an acoustic transmitter pipe having one end immersed in the liquid proximate and spaced from the container;
 - an aerosol tube positioned around a portion of the acoustic transmitter pipe;
 - an acoustic energy source being operatively coupled to the container for nebulization of the liquid and being configured for transmission of acoustic energy to a focal region of the liquid proximate said one end of the acoustic transmitter pipe whereby said liquid is forced toward an opposite end of the acoustic transmitter pipe and nebulised within the aerosol tube.
19. (Previously presented) The nebulizer of claim 18 wherein the energy source is positioned below the container.
20. (Cancelled).

21. (Previously Presented) The nebulizer of claim 18 wherein the acoustic transmitter pipe is positioned so that said one end is proximate the bottom of the container.
22. (Cancelled).
23. (Cancelled).
24. (Previously Presented) The nebulizer of claim 18 wherein an internal diameter of the aerosol tube is greater than an outer diameter of the acoustic transmitter pipe at the opposite end of the acoustic transmitter pipe.
25. (Previously Presented) The nebulizer of claim 18 wherein the aerosol tube is positioned so that it is substantially coaxial with the acoustic transmitter pipe.
26. (Previously Presented) The nebulizer of claim 25 wherein the aerosol tube is connected to the opposite end of the acoustic transmitter pipe.
27. (Previously presented) The nebulizer of claim 26 wherein the energy source vibrates the liquid proximate the opposite end of the acoustic transmitter pipe.
28. (Previously Presented) The nebulizer of claim 18 wherein the aerosol tube opens at its upper end into an expansion chamber which in turn communicates with an outlet duct.
29. (Previously Presented) The nebulizer of claim 28 wherein the expansion chamber is adapted to

return non-nebulized liquid to the container via a drainage pipe.

30. (Currently amended) The nebulizer of claim 18 wherein the energy source comprises an ultrasonic transducer ~~for transmission of ultrasonic radiation energy~~.

31. (Currently amended) The nebulizer of claim 30 ~~23~~ wherein the ultrasonic transducer has a concave shaped surface.

32. (Cancelled).

33. (Cancelled).

34. (Currently amended) The nebulizer of claim 18 ~~32~~ wherein an internal diameter of the acoustic transmitter pipe is substantially equal to a diameter of ~~[[a]] the focal region around said focal point~~.

Claims 35-38. (Cancelled).

39. (Currently amended) The nebulizer of claim 28 ~~[[,]]~~ further comprising a partition wall located to one side of the expansion chamber to separate the outlet duct from the acoustic transmitter pipe.

40. (New) The nebulizer of claim 18 wherein the acoustic transmitter pipe has a higher acoustic impedance than the liquid.

41. (New) The nebulizer of claim 30 wherein the ultrasonic transducer is a bowl-shaped ultrasonic transducer.
42. (New) The nebulizer of claim 18 also comprising an air inlet for replenishment of air during nebulization of the liquid.
43. (New) The nebulizer of Claim 18 wherein said energy source and said acoustic transmitter pipe are configured such that a guided spout of said liquid to be nebulized is emitted from said opposite end of said acoustic transmitter pipe.
44. (New) The nebulizer of Claim 43 wherein said guided spout is emitted with a diameter equal to a diameter of said opposite end of said acoustic transmitter pipe.
45. (New) A nebulizer comprising:
a reservoir for containing an initial volume of a liquid to be nebulized, said initial volume of said liquid having a liquid surface located at an initial surface level within said reservoir;
a tubular sound-transmitting conduit for said liquid, said conduit having a liquid inlet end positioned within said reservoir at a liquid inlet location below said initial surface level, and a liquid outlet end positioned at a nebulizing location above said initial surface level;
a source of ultrasonic energy configured to transmit said ultrasonic energy to a focal region

located generally on an axis of said conduit adjacent to said inlet end of said conduit;

said conduit being configured to contain a column of liquid extending from said liquid inlet end to said liquid outlet end and to transmit said ultrasonic energy from said focal region to said liquid outlet end, at least through said column of liquid, and

said source of ultrasonic energy being operative to supply said ultrasonic energy to said focal region with sufficient intensity to advance said liquid to be nebulized through said conduit and out said liquid outlet end and to nebulize said liquid exiting from said outlet end.

46. (new) The nebulizer of Claim 45 wherein said reservoir has an interior bottom surface and said focal region is adjacent said interior bottom surface.
47. (new) The nebulizer of Claim 45 wherein said source of ultrasonic energy is a concave transducer.
48. (new) The nebulizer of Claim 45 wherein said conduit has a wall configured to transmit said ultrasonic energy from said liquid inlet end to said liquid outlet end.
49. (new) The nebulizer of Claim 45 wherein said ultrasonic energy is directed generally upward along said axis of said conduit.

49. (New) The nebulizer of Claim 45 wherein said source of ultrasonic energy and conduit are configured such that a guided spout of said liquid to be nebulized is emitted from said liquid outlet end of said conduit.
50. (New) The nebulizer of Claim 49 wherein said guided spout is emitted with a diameter equal to a diameter of said liquid outlet end of said conduit.